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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/497,238	02/03/2000	Heikki Kokkinen	915-310-1	7249

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EXAMINER

HOYE, MICHAEL W

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/497,238	Applicant(s) KOKKINEN, HEIKKI	
	Examiner Michael W. Hoye	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 10 is/are allowed.
- 6) ☐ Claim(s) 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 08/979,489.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Amendment, filed August 23, 2004, with respect to the rejection of claim 17 under 35 U.S.C. 102(e) as being anticipated by Ghaibeh (USPN 5,926,476) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lin et al (USPN 5,966,163).

Applicant's arguments, with respect to the rejection of independent claim 10 under 35 U.S.C. 103(a) as being unpatentable over Ghaibeh (USPN 5,926,476), in view of Kolze et al (USPN 6,285,681) have been fully considered and are persuasive. The rejection of claim 10 under U.S.C. 103(a) has been withdrawn. However, the double patenting rejection will be maintained, until the applicant files a terminal disclaimer.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claim 10 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,091,440. Although the conflicting claims are not identical, they are not patentably distinct from each other as follows: The claimed method for transmitting digital data in a channel of a cable television system of claim 10 equates to the claimed method for transmitting digital data in a channel of a cable television system of patented claim 2. The claimed applying TDMA of claim 10 equates to the claimed applying TDMA of patented claim 2. The claimed slots of a defined slot length are assigned for terminal equipment in order to distribute the use of data transmission capacity to the equipment of claim 10 equates to slots of a defined slot length are assigned for terminal equipment in order to distribute the use of data transmission capacity to the equipment of patented claim 2. The claimed use of slots in the cable TV system are controlled by indications transmitted downstream of claim 10 equates to the use of slots in the cable TV system are controlled by indications transmitted downstream of patented claim 2. The claimed slots are further divided into mini slots of claim 10 equates to the slots are further divided into mini slots of patented claim 2. The claimed indications transmitted downstream of claim 10 equates to the indications transmitted downstream of patented claim 2. And the claimed length of three mini slots plus a guard byte is the same as the defined slot length of claim 10 equates to the length of three mini slots plus a guard byte is the same as the defined slot length of patented claim 2. Claim 10 differs from patented claim 2 in that the claim recites transmitting digital data in an additional channel of a cable television system whereas patented claim 2 recites transmitting digital data in a channel of a cable television system. However, a minor variation in wording does not affect the scope of the claimed method. The portion of the specification in patent

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6,091,440 that supports the recited additional channel that would anticipate claim 10 herein for transmitting digital data in an additional channel of a cable television system applying TDMA is met by the Abstract, col. 1, lines 30-46 and col. 5, lines 37-66.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kou (USPN 5,303,234), previously cited by the Examiner.

As to claim 17, note the Kou reference which discloses the claimed method for transmitting digital data in an additional channel (access channel, col. 1, line 27) of a communications system applying time division multiple access (TDMA) (see central station 1 and a plurality of remote terminal stations 2 in col. 1, lines 7-13 and line 37 – col. 2, line 1) in which slots of a defined slot length are assigned for terminal equipment in order to distribute the use of data transmission capacity to the equipment (col. 3, lines 3-18), and the slots in the communications system are controlled by use indications transmitted downstream (col. 1, line 63 – col. 2, line 6), which slots are further divided into mini slots, the use of which is controlled by the indications transmitted downstream, wherein mini slots are used for the transmission of reservation messages which the terminal equipment use for informing a central configuration that the terminal equipment wish to reserve data transmission capacity (see col. 2, lines 3-18, col. 5,

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lines 6-30 and 56-67 and col. 6, lines 4-65). Although the Kou patent specifically uses a satellite communications system, it would have been obvious to one of ordinary skill in the art to have incorporated the methods as taught by the Kou reference for use in a cable television system instead.

As to claims 18 and 19, the claimed central configuration system and terminal equipment system are rejected based on the rejection of claim 17 above.

Allowable Subject Matter

6. Claim 10 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

As for independent claim 10, the prior art, alone or in combination, does not teach or fairly suggest slots of a defined slot length that are assigned to distribute the use of data transmission capacity further divided into mini slots, wherein the length of three mini slots plus a guard byte is the same as the defined slot length. As for the most pertinent prior art of record, the Ghaibeh (USPN 5,956,338) reference discloses an 11 byte polling mini slot as shown in Fig. 13 and a plurality of upstream mini request slots 222 within a 68 byte polling slot 58, but does not teach or suggest that the length of three mini slots plus a guard byte is the same as the defined slot length. In the applicant's invention the feature as described above is specifically disclosed in claim 10.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ahmadi et al (USPN 5,384,777) – Discloses an adaptive medium access control scheme for Local Area Networks (LAN), which includes the use of a control channel, mini-slots, and a contention channel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is (703) 305-6954. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (703) 305-4795.

Any response to this action should be mailed to:

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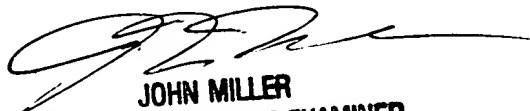
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Or faxed to: (703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to customer service whose telephone number is **(703) 308-HELP**.

Michael W. Hoye
January 22, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600